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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/281,464	03/30/1999	FOLKERT HORST	0690811-0007	7264

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EXAMINER

PHU, PHUONG M

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/281,464

Applicant(s)

HORST ET AL.

Examiner

Phuong Phu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 53-57, 59-65, 67, 68, 85-99, 104-106, 145-155, 163 and 164 is/are allowed.
- 6) ☒ Claim(s) 30, 31, 43, 47, 69-79, 107-110, 112-117, 119, 120, 122-124, 127, 130, 133, 135, 161 and 162 is/are rejected.
- 7) ☒ Claim(s) 32, 33, 44-46, 80-83, 121, 129, 131, 132, 137, 159 and 160 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/7/05, 7/2/04

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Continuation of Disposition of Claims: Claims pending in the application are 30-33,43-47,53-57,59-65,67-83,85-99,104-110,112-117,119-124,127,129-133,135,137,145-155,161-164,.

### **DETAILED ACTION**

This Office Action is responsive to the Amendment filed on 9/7/05.

#### ***Information Disclosure Statement***

1. Regarding to the IDS filed on 12/31/03, the Office has not received or does not have a record of Form 1449 associated with the IDS. The applicant is required to submit a copy of this form.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 47 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 47 recites the limitation "A transmitter as defined in claim 41". It is unclear which transmitter claim 47 refers to because claim 41 is a canceled claim.

4. Claims 30, 31, 161, 43, 162, 71-78, 107-110, 112-114, 122-124, 127 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

Claims 30, 31, 161 omit structural/functional/co-operational interrelationships of element "a signal transmit unit" with other elements (e.g., interface, message builder, message encoder, etc) (see claim 30) in order to make the claimed transmitter as a completely structural/functional cooperative system. Such omission leads to an unclearness about functional/co-operational

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interrelationships of the limitation “a signal”, recited on line 16, with other input/outputs signal of said other elements.

Claim 43, 162 omit structural/functional/co-operational interrelationships of element “message encoder” with element “a signal transmitting unit” (see claim 43) in order to make the claimed transmitter as a completely structural/functional cooperative system. Such omission leads to an unclearness about the usage of encoded “message” of the “message encoder” in operations of said claimed transmitter.

Claim 71-78 omit the usage of “an identifier of said transmitter” (see claim 71) in operations of the claimed remote control system.

Claim 73-78 omit structural/functional/co-operational interrelationships of element “message builder” (see claim 73) with element “signal transmitting unit” (recited in claim 72) in order to make the claimed transmitter as a completely structural/functional cooperative system. Such omission leads to an unclearness about the usage of “message” of the “message builder” in operations of said claimed transmitter or in operations of said claimed remote control system.

Claim 107-110, 112, 113, 114 omit structural/functional/co-operational interrelationships of “a memory” (of “first component”) and “a memory” (of “second component”) (see claim 107) with each other and with other elements recited in the claim. In claims 107-110, 112, 113, it is unclear about the usage of “second identifier” in operations of the claimed device.

Claims 122, 123, 124, 127 omit the usage of “second identifier” (see claim 122) in operations of the claimed apparatus.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 69, 70, 71, 72, 79, 107-110, 112, 113, 122-124, 127 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kiriya (5,729,210), previously cited.

-Regarding to claim 69, see figures 3-7, 9A, 9B, and col. 3, line 1 to col. 5, line 10, Kiriya discloses a system comprising:

a slave controller (10, 30) (see figure 3) for mounting on-board a locomotive (see figures 9A, 9B);

a transmitter (20) (see figure 3) for transmitting a wireless signal over a first communication link to device (30) of said slave controller a wireless signal being indicative of at least one command for causing an action to be performed by the locomotive;

said slave controller being responsive to the wireless signal to generate control signals for transmission to a controller module "electronic equipment" to implement the at least one command (see col. 4, line 66 to col. 5, line 3);

said controller being operative to output over a second communication link from (13) (see figure 3), an identifier of said slave controller "identification code" for transmission to the said transmitter, the second communication link being a wireless communication link (see col. 3, lines 4-12);

the wireless signal including data (PERSONAL ID CODE) derived from the identifier of said slave controller (see figure 6).

Kiriyama does not disclose whether the first communication link is an RF communication link.

Kiriyama discloses that the first communication link is a wireless communication link (see figure 3).

Implementing a wireless communication link as an RF wireless communication link is well-known in the art, and the examiner takes Official Notice.

Since Kiriyama does not teach in detail how the first communication link is implemented, it would have been obvious for one skilled in the art, when building or carrying out Kiriyama invention, to implement Kiriyama first communication link as an RF wireless communication link so that such the implementation would provide the first communication link as required.

-Regarding to claim 70, Kiriyama disclose that said transmitter includes a data storage (25) for storing said identifier of said slave controller (see figure 3).

-Regarding to claim 71, Kiriyama does not disclose that said data storage store an identifier of said transmitter. However, using a storage for storing more than one piece of information is well known in the art, and the examiner takes Official Notice. It would have been obvious for one skilled in the art, when building or carrying out Kiriyama invention, without affecting the overall system performance, to store in the data storage an identifier of said transmitter for indicating an address of the said transmitter.

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-Regarding to claim 72, Kiriya discloses that said transmitter include a signal transmitting unit (24) for transmitting the wireless signal over the first communication link (see figure 3).

-Regarding to claim 79, Kiriya discloses that said slave controller includes:  
a data storage (11) for holding the identifier of said slave controller;  
an interface (12, 13) in communication with said data storage, said interface outputting over the second communication link via said interface the identifier of said slave controller (see figure 3).

-Regarding to claim 107, see figures 3-7, 9A, 9B, and col. 3, line 1 to col. 5, line 10, Kiriya discloses a device (20) (see figure 3) for used in a system comprising first component (10) having a memory (11) for storing a first identifier ("identification code") as an identifier of the device and a second component (30) having a memory (34), wherein the device comprises:

a port (23, 24) for establishing a communication link with the first component and for establishing a communication link with the second component, the communication link with one of the first and second component being wireless communication link;

a memory unit (25);

processing unit (22) coupled to said port and said memory unit for performing:

(i) establishing a communication link through said port with the first component for acquiring the first identifier from the first component;

(ii) storing the first identifier in said memory;

(iii) establishing a communication link through said port with the second component for transmitting the first identifier stored in said memory unit to the second component.



Kiriyama does not disclose that the second component's memory (34) store a second identifier. However, using a storage for storing more than one piece of information is well known in the art, and the examiner takes Official Notice. It would have been obvious for one skilled in the art, when building or carrying out Kiriyama invention, without affecting the overall system performance, to store in memory (34) a second identifier as an identifier of the second component for a future potential communication having more than one of such second component.

-Regarding to claim 108, Kiriyama discloses that the first component is for controlling a locomotive (see figures 9A, 9B), and the second component is a transmitter for transmitting control signals to cause an electronic equipment to execute some action (see col. 4, line 66 to col. 5, line 3).

-Regarding to claim 109, Kiriyama discloses that the first component is a transmitter (see figure 3) and the second component is a module for controlling a locomotive (see figures 9A, 9B).

-Regarding to claim 110, Kiriyama discloses that said port has a first interface (23) for communication with the first component and a second interface (24) for communication with the second component (see figure 3).

-Regarding to claim 112, Kiriyama discloses that the first interface is an infrared interface (see col. 3, lines 4-12).

-Regarding to claim 113, Kiriyama discloses that the first and second interfaces are serial connection interface (see figure 3).

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-Regarding to claim 122, see figures 3-7, 9A, 9B, and col. 3, line 1 to col. 5, line 10, Kiriya discloses a computing system (see figure 3) comprising:

a memory unit(25) ;  
a processing unit (22) for executing a program element (figure 5), said processing unit in an operative relationship with said memory, when said program element is executed by said processing unit, said element causing:

(i) establishing of a communication link between the computing system and a first component (10) for acquiring a first identifier ("identification code") from the first component;

(ii) storage of the first identifier in said memory;

(iii) establishment of a communication link between the computing system and a second component (30) for transmitting the first identifier stored in said memory unit to the second component, the communication link between the computing system and the first component being a wireless communication link.

Kiriya does not disclose that the program element is included in a readable storage.

Implementing a processing unit for controlling operations of a system as a programmable processor to control said operations by executing a program element stored in a readable storage is well-known in the art, and the examiner takes Official Notice.

Since Kiriya does not disclose in detail how the processing unit is implemented, it would have been obvious for one skilled in the art to implement Kiriya processing unit as a programmable processor having a readable storage for storing the program element to be executed by the programmable processor so that such the implementation would provide the processing unit as required.

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-Regarding to claim 123, Kiriyaama discloses that the first component is a controller module for controlling a locomotive (see figures 9A, 9B) and the second component is a transmit unit (see col. 4, line 66 to col. 5, line 3).

-Regarding to claim 124, Kiriyaama discloses that the first component is a transmit unit and the second component is a control module (see figure 3).

-Regarding to claim 127, Kiriyaama discloses that the wireless communication link is an infrared communication link (see col. 3, line 4-12).

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 115-117, 119, 120, 130, 133, 135 are rejected under 35 U.S.C. 102(b) as being anticipated by Kiriyaama.

-Regarding to claim 115, see figure 8, col. 5, line 13 to col. 6, line 22, Kiriyaama discloses a method comprising:

step (20) of establishing a communication link between an operating unit (20) and a first component (13) for transmitting a first identifier ("1234") from the first component to the operating unit;

step (20) of establishing a communication link between the operating unit and a second component (30, 31) for transmitting the first identifier from the operating unit to the second

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component, wherein the communication link between the operating unit and the second component is a wireless communication link;

step (inherently included in (31, 40<sub>1</sub>)) of generating an address at the second component on the basis of the first identifier and a second identifier ("identification information") in order to make comparison with signals received from the operating unit (see col. 5, lines 33-47, col. 6, lines 1-21).

-Regarding to claim 116, Kiriya discloses that the first component is a control module and the second component is a unit (see figure 8).

-Regarding to claim 117, Kiriya discloses that the first component is a transmit unit and the second component is a controller module (see figure 8).

-Regarding to claim 119, Kiriya discloses that said wireless component is an infrared communication link (see figure 8).

-Regarding to claim 120, Kiriya discloses that said communication link between the operating unit and the first communication link is a serial communication link (see figure 8).

-Regarding to claim 130, see figure 3-8, and col. 3, line 1 to col. 5, line 10, col. 5, line 13 to col. 6, line 22, Kiriya discloses a system comprising:

a first component (10) (see figure 8) having a memory (11) (see figure 3) for storing to generate a first identifier ("1234") (see col. 5, lines 57-60);

a second component (30, 31, 40<sub>1</sub>) (see figure 8) having a memory (inherently included) for storing a second identifier ("identification information") (see col. 5, lines 35-40);

a device (20) (see figure 8) comprising:

(i) a port (23, 24) (see figure 3) for establishing a communication link with the first component and a communication link with the second component;

(ii) a memory unit (25) (see figure 3):

(iii) a processing unit (22) (see figure 3) of performing:

establishing a communication link through said port with said first component for acquiring the first identifier from the first component;

storing the first identifier in said memory unit;

establishing a communication link through said port with said second component for transmitting the first identifier stored in said memory unit to said second component, such as to allow said second component to hold the first identifier and the second identifier in a storage unit (inherently included, the storage unit at least comprising storage (34) (see figure 3)) at said second component for comparing with signals received from said device (see col. 5, lines 35-41; col. 6, lines 8-18)

wherein said second component inherently includes action of generating an information on the basis of the first identifier and second identifier component for comparing with identifiers being conveyed in signals received from said device (see col. 5, lines 35-41; col. 6, lines 8-18), wherein the communication link with the first component is a wireless communication link (see figure 8).

-Regarding to claim 133, Kiriya discloses that said port has a first interface (23) for communication with said first component and a second interface (24) for communication with said second component (see figure 3).

-Regarding to claim 135, Kiriya discloses that said first interface is an infrared interface (see figure 8).

***Allowable Subject Matter***

9. Claims 53-57, 59, 60, 163, 61-65, 67, 68, 164, 85-99, 104-106, 145-155 are allowed.
10. Claims 32, 33, 44-46, 80-83, 121, 129, 131, 132, 137, 159, 160 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

11. Applicant's arguments filed on 9/7/05 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 571-272-3009. The examiner can normally be reached on M-F (6:30-2:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 571-272-3021. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Phuong Phu*

Phuong Phu  
09/27/05

**PHUONG PHU  
PRIMARY EXAMINER**

Phuong Phu  
Primary Examiner  
Art Unit 2631